HIGH Q ON-CHIP INDUCTOR AND METHOD OF MANUFACTURE THEREOF

ABSTRACT OF THE DISCLOSURE

A high Q on-chip inductor includes a primary winding and an auxiliary winding that is coupled to receive a proportionally opposite representation of an input of the primary winding. Further, the auxiliary winding has an admittance that is greater than the admittance of the primary winding thereby yielding an asymmetry in the admittances. As such, a push/pull mechanism is obtained in a 2-port system (e.g., 1st and 2nd nodes of the primary winding) that produces a large Q factor for an on-chip inductor.